“But when one draws a boundary it may be for various kinds of reason. If I surround an area with a fence or a line otherwise, the purpose may be to prevent someone from getting in our out; but may also be part of a game and the players be supposed, say, to jump over the boundary; or it may show where the property of one man ends and that of another begins; and so on. So if I draw a boundary line that is not yet to say what I am drawing it for.”—Wittgenstein
PROPOSAL

The horrific beauty of the Secure Fence Act of 2006, which mandates the construction of over 700 miles of double-reinforced fence to be built along the 1,969-mile long Mexico-U.S. border, is its capacity to transform large cities, small towns, and a multitude of ecological biomes. While the placement of the fence to prevent the crossing of illegal immigrants to the U.S. is questionable, it has proved to be tremendously successful in stopping the migration of wildlife. It has also become a barrier for other natural flows such as water. Heavy rainfall that is blocked and diverted by the wall has made its way into towns and cities causing unexpected floods.

It is a utopian scenario, engineered for a conceptual tabula rasa defined by Department of Homeland Security Secretary Michael Chertoff who was given unprecedented powers by then President George Bush to waive any and all laws in order to expedite the wall’s construction. Ignoring the rich and diverse contexts found along the border not only raises critical questions of ecology, politics, economics, archeology, urbanism and eminent domain (to name a few); it also radically redefines and transforms the territories of the frontera. The proposed fence meanders sometimes as far as two miles north of the U.S.-Mexico border dividing public lands and the private property of American citizens. In this zone, on both sides of the fence, and the actual border are ambiguous spaces of conflict that demand careful examination and reconsideration. For example, the Army Corps of Engineers proposes that the fence cut directly through the University of Texas at Brownsville campus requiring students and faculty to make border crossings in order to attend classes. In another case, the border wall becomes a dam not just for people; re-routing desert rains to the border sister cities of Nogales, Arizona and Mexico, creating an accidental and temporary Tenochtitlan – a water city destined for run and division by militaristic and colonial forces.

For the most part, architects and designers have stayed away from the border security issue because it is too political. Ricardo Scofidio of Diller Scofidio + Renfro in New York said about architect’s involvement in a border fence project: “It’s a silly thing to design, a conundrum. You might as well leave it to security and engineers.” To date, the border wall design has been chiefly the dominion of these professionals, and in the past 10 years there have been approximately 5,000+ migrant deaths along the U.S.-Mexico border. Since the Secure Fence Act of 2006, the annual death rate continues to increase as men, women and children attempting to cross the border are pushed to further extremes.

While the border wall is not an efficient toll in stopping illegal immigration, it is a powerful symbol of security for many U.S. citizens. Yet, its manifestation is a product of limited directives. Which it is well know not to be able to accomplish to keep people out, away (some say to keep people in) and do nothing more. Nevertheless there exists far more potential in a construction project that is estimated to cost up to $1,325.75 per linear foot.

There are perhaps no architectural solutions to the fence and architects must accept both the distopia and the reality that the wall presents as they have no say in its construction. However the border as a far-reaching and budget-rich construction project might have far more potential as a type of infrastructure that can breed positive scenarios. It is my hope that these proposals reveal the inanity while at the same time expose it’s latent potential of the ‘other’ spaces formed by the fence – ‘heterotopic’ or ‘third nation’ spaces as defined by Michael Foucault and geographer Dr. Michael Dear respectively – that reveal the potential for designers to intercede, intervene or interject into one of the largest and most expensive construction projects in the United states.
Existing and Proposed Walls
There are two primary ways to think about how to address the Border Wall. First, there are areas where the wall currently exists. This reality changes quickly as Congress and construction companies who have the contracts to build rush to see the fence constructed before political pressures take them away. Then there are the areas where new walls are proposed. These are often areas in turmoil as opponents of the fence protest its construction.

Typologies
Walls are organized in single, double, triple or more layers depending on the topography, incidence of crossings, available patrol resources and other factors. Congress recently passed a bill mandating the doubling of 320 miles of fence that are currently single wall construction. There are triple layers walls defining the border between San Diego, California and Tijuana, Mexico. Walls can be defined by the following typologies:

Pedestrian—Constructed to prevent pedestrian crossing and often has a high transparency for surveillance.

Vehicular—Designed to withstand the impact of a large vehicle, often with a heavy concrete base.

Hybrid—Contains features of both pedestrian and vehicle walls.

Levee—Used along rivers to control flooding and prevent illegal crossings.

Natural—Rivers, Deserts, Temperature extremes, Rough Terrain are all considered natural barriers.

Virtual—Walls: Employ technologies such as motion detection, radar, sonar, infrared, wifi and photography.

Stipulations
The border wall has only limited directives—to keep people out, away (some say to keep people in) and nothing more. Nevertheless, there exists far more potential in a construction project that is estimated to cost up to $1,325.75/linear foot. The propositions put forth are suggestions of that potential, each driven by 3 stipulations:

All walls are Common Walls
Special laws often govern walls shared by neighboring properties. Typically, one neighbor cannot alter the common wall if it is likely to affect the building or property on the other side. Each wall has two sides and breaking a wall on one side will break the wall on the other side.

All walls are attractors
The current border wall is meant to keep people out and away. Proposals should reconsider the design to serve as attractors that engage both sides in a common dialogue.

All walls are temporary
Each wall should be placed with the consideration that it will eventually be removed or reconsidered—creating an even more valuable post-border wall condition.

30 Alternative Proposals for the U.S./Mexico Border Wall
(in alphabetical order according to the traditional Spanish alphabet)

Aqueduct wall, Burrito wall, Climbing wall, Cholla (type or cactus) wall, Dam Wall, Elastic Wall, Forest Wall, Garden wall, House wall, Inflatable wall, Junk wall, Kissing wall, Labyrinth wall, Llano (stockpiled plains between Eastern New Mexico and Texas) wall, Museum wall, Nest wall, Ñublina (fog) wall, Organ Pipe Cactus National Monument wall, Party Wall, Quilt Wall, River Wall, RR: There are no words that begin with RR. Here we will speak about borders that don’t begin with a wall, Solar wall, Teeter-totter wall, University wall, Video wall, Wildlife Wall, Xylophone wall, Yucca wall, Zen wall
According to Ken Clements of the Friendship Solar Array Project, “If one thousand miles of border had solar panels arrayed 30 feet wide, that would be 1000 miles × 5280 ft/mile × 30 ft = 158,400,000 sq. ft. One meter is 3.2808 ft, so 1000 W/sq m (at peak sun) is 92.905 W/sq ft. Thus peak sun power for a 1000 mile array is 14,716,200,000 Watts. If the final photovoltaic (sunlight to electricity) conversion was a conservative 10%, this would result in peak electric power of 1,471,620,000 Watts or 1,472 Megawatts, enough to power at least 150,000 homes. In the summer, many areas of the border have strong sunlight in excess of 8 hours per day, just when the need for peak power is greatest. This is a large enough array to get the desired economy of scale. The central object of the project is to provide enough power to pay for itself, not to solve that national energy problem, but this can be one of many small steps. As more power is desired, the array can be made longer.”
HYDRO WALL
Water and air quality in the border regions suffer a disproportionate amount of environmental degradation compared to each nation's overall environmental standing. The 14 metropolitan areas along the border have abysmal air and water quality. Water is the most limited resource in this primarily arid region. Many migrant deaths are caused by dehydration as they cross the harsh desert. The border wall has also caused severe flooding where rain has fallen, blocking natural drainage systems and damming in entire neighborhoods. A Hydro Wall would collect water and store potable safe water over the span of several miles for distribution on both sides of the wall.
FOREST WALL

Once found across much of the lower Gulf Coast, sabal palm forests have all but vanished under the plow. While some scattered trees can be found on private lands in the region, the significant remaining stands of these towering trees are located at Lennox Foundation Southmost Preserve, the Sabal Palm Audubon Center and the Lower Rio Grand Valley National Wildlife Refuge. All three of these conservation areas lie in the path of the border fence. In order to save the sabal palms that would otherwise be leveled by fence construction, the Conservancy is partnering with the U.S. Fish and Wildlife Service and Audubon Texas, in coordination with the U.S. Army Corps of Engineers, to transplant the palms to safe ground, one tree at a time. The trees, which grow as tall as 65 feet and are up to 100 years old, are being uprooted and hauled to a number of locations, most within a mile of their original site, where they are then carefully replanted. It is a massive undertaking and a race against the clock. Each of the approximately 300 trees must be thoroughly trimmed and the root balls carefully unearthed intact to ensure survival. The project, which is already underway, is expected to last through the summer. Along the border with Eagle Pass, Texas, Mexicans, with support from their government, have begun to plant the first of 400,000 tees to form a “green wall” in protest of the fence. The tree-line will eventually stretch for 318 miles along the border between the Mexican state of Coahuila and Texas. Forest Wall adapts the tree-line protest by proposing a double fence condition around the sabal palm preserve, thus addressing security concerns and protecting our environmental heritage. A forest surrounded by a double or triple fence is a perverse take on a reserve – a preservation of an ecology that in a post-border condition could serve to stitch the two sides back together again.
WILDLIFE WALL
The Border Wall, existing and proposed, cuts through countless wildlife and nature reserves. The borderland between the U.S. and Mexico includes grasslands, mountains and desert habitats that support a diverse range of wildlife. The Lower Rio Grande Valley alone hosts 17 endangered or threatened species. Ensuring the free movement of critically endangered species between Mexico and the U.S. will have important impacts on breeding and genetic diversity for those animals. The biggest concern is that the barrier will break small populations of animals into even smaller groups resulting in fewer animals interacting. The wall could ultimately threaten entire species. The key is to have gaps in the fence that are sufficient to allow passage of animals while at the same time meeting security needs. A Wildlife Wall would contain special openings that allow for the passage of wildlife, and would create opportunities for shelter and safe nesting spots. It would also allow for people from each country to experience nature on both sides of the wall.
BURRITO WALL
Casual exchange is common across the border wall ranging from small talk, long visits with friends and family, and commercial exchanges of items ranging from food and bracelets to illegal merchandise. The Burrito Wall accommodates for a food cart to be inserted into the wall. The proximity to the wall and the security overhang create shade. Seating is built into the wall and food, conversation or a bi-national game of footsie can occur across the border.

CONFESSIONAL WALL
The division created by the wall often heightens border exchanges. In Friendship Park – a beach park that spans both San Diego, CA and Tijuana, Mexico – intimate exchanges are common. Each Sunday afternoon Holy Communion is offered through the fence – increasingly as an act of civil disobedience. Here the fence serves as an opportunity for confession, with both confessor and priest transcending the border to perform the rite.
CLIMBING WALL
“Show me a 20 foot fence and I’ll show you a 21 foot ladder” has become a mantra for describing the fence’s inadequacies. Various techniques have been used to surmount the wall. Artist Judi Werthein has created special shoes called Brincos (jumpers) – “crossing trainers” – designed to help illegal immigrants negotiate the sometimes deadly terrain they encounter when crossing the border from Mexico to the U.S. Various makeshift platforms/ramps have also been erected to allow cars to drive over the border fence. Here, the act of climbing the fence becomes not more difficult, but more challenging, as it takes on the language of a rock climbing wall with various routes and grading.

XYLOPHONE WALL
Musician, Glenn Weyant, performs music on the wall that divides Mexico from the United States. Weyant places contact microphones on a section of the wall near Nogales, Arizona, and then he uses a cello bow against the metal of the wall to create exotic and avant-garde sounds. The Xylophone Wall allows for multi-person/bi-national informal and formal performances on the border.
The trade and labor relationships between the U.S. and Mexico are in delicate balance. Mexicans throng to the U.S. to find work, but often long to live comfortably in their own country. U.S. industry and agriculture is dependant upon immigrant labor pools, yet the Department of Homeland Security, Border Patrol, and Immigration and Naturalization Services have made it increasingly difficult to attract foreign labor. The Teeter – Totter plays out the delicate balances between the two nations.
"I don't invest the fence with the iconic significance that some people place on it. To some people, it is a be-all and end-all of controlling the border. To some people, it is a symbol of . . . the Berlin Wall. I think it's a tool." — Michael Chertoff